

REMARKS

Applicant respectfully requests reconsideration of the present application in view of the foregoing amendments and in view of the reasons that follow.

As a preliminary matter, Applicant notes the Office Action's consideration of the Information Disclosure Statement filed on March 22, 2004.

Claims 1, 3, 4, 9, 11 and 12 stand rejected under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent No. 7,200,268 to Ishizuka et al. (hereinafter "Ishizuka"). Claims 2 and 13 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Ishizuka in view of U.S. Patent No. 6,753,976 to Torpey et al. (hereinafter "Torpey"). Claims 5-7 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Ishizuka in view of U.S. Patent No. 6,890,261 to Nagase. Claim 8 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Ishizuka in view of U.S. Patent No. 5,204,756 to Chevion et al. (hereinafter "Chevion"). Claim 10 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Ishizuka in view of well known prior art.

By this amendment, claims 5-8 have been canceled without prejudice to or disclaimer of the subject matter contained therein. Independent claims 1, 11 and 12 have been amended to incorporate some of the subject matter of canceled claims 5-7 and to further define the subject matter Applicant regards as the invention as discussed in greater detail below. Claims 2-4, 9, 10 and 13 remain unchanged in the application.

This amendment adds, changes and/or deletes claims in this application. A detailed listing of all claims that are, or were, in the application, irrespective of whether the claim(s) remain under examination in the application, is presented, with an appropriate defined status identifier. After amending the claims as set forth above, claims 1-4 and 9-13 are now pending in this application for consideration.

Applicant respectfully submits that the claims are patentably distinguishable over the cited references as required by §103. Applicant further submits that none of the cited references, whether considered alone or in combination, discloses Applicants' claimed program for causing an image forming apparatus, which forms an image on the basis of PDL information, to execute a process, having the steps of: (1) *determining* whether the PDL

information is a line object that is drawn by a line drawing command; (2) *comparing*, if it is determined that the PDL information is a line object that is drawn by a line drawing command, at least one of attributes of the line object that are a width, an angle, a line type, hue, saturation, brightness, and an angle of a screen pattern with a threshold; and (3) *executing change of the attributes* of the line object in accordance with a comparison result, the change of the attributes of the line object being one of the change of color of the line object, change of line width of the line object and change of both the color and line width of the line object as required by amended independent claim 11.

Amended independent claim 12 is also directed to a program for causing an image forming apparatus to execute a process, and includes substantially the same steps as claim 11, except for the PDL information is composed of a polygon. Amended independent claim 1, is an apparatus claim directed to a system that practices the method of independent claim 11. By contrast, the cited references fail to disclose, teach or suggest these claimed features and arrangements. Accordingly, independent claims 1, 11 and 12 and claims dependent therefrom are patentably distinguishable over the cited references. These distinctions will be further described below.

THE CLAIMS DISTINGUISH OVER THE CITED REFERENCES

Claims 1, 3, 4, 9, 11 and 12 stand rejected as being anticipated by Ishizuka and claims 2, 5-8, 10 and 13 stand rejected as being unpatentable over Ishizuka in view of Torpey, Nagase, Chevion or well known prior art. Since some of the subject matter of canceled claims 5-7 has been incorporated in independent claims 1, 11 and 12, Applicant respectfully submits that the cited references, whether considered alone or in combination fail to disclose, teach or suggest each of these claimed features recited above. Applicant respectfully traverses the rejections of these claims, and submits that these claims are allowable for at least the following reasons.

The framework for the objective analysis for determining obviousness under §103 requires:

1. Determining the scope and content of the prior art;
2. Ascertaining the differences between the claimed invention

- and the prior art;
3. Resolving the level of ordinary skill in the pertinent art; and
 4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Teleflex, Inc. v. KSR Int'l Co., 127 S. Ct. 1727, 82 USPQ2d 1385 (2007); *Graham v. John Deere Co.*, 383 U.S. 1, 17-18 (1966). In order to establish a *prima facie* case of obviousness, all the claim limitations must be taught or suggested by the prior art. *In re Vaeck*, 947 F.2d 488, 20 U.S.P.Q.2d 1438 (Fed. Cir. 1991). See MPEP §2143.03.

The Cited References Do Not Suggest All Claim Recitations

The cited references do not meet one of the requirements of MPEP § 2143, which is that “the prior art reference (or references when combined) must teach or suggest all the claim limitations.”

Embodiments of the present invention are directed to a program for causing an image forming apparatus, which forms an image on the basis of printer description language (PDL) information, to execute a process. The process includes the steps of determining whether PDL information is a line object, comparing, if it is determined that the PDL information is a line object, executing change of attributes and drawing the line object with changed attributes.

According to one embodiment of the present invention as recited in amended independent claim 11, the steps further require:

- (1) ***determining*** whether the PDL information is a line object that is drawn by **a line drawing command**;
- (2) ***comparing***, if it is determined that the PDL information is a line object that is drawn by **a line drawing command, at least one of attributes of the line object that are a width, an angle, a line type, hue, saturation, brightness, and an angle of a screen pattern with a threshold**; and
- (3) ***executing change of the attributes*** of the line object in accordance with a comparison result, the change of the attributes of the line object being

one of the change of color of the line object, change of line width of the line object and change of both the color and line width of the line object.

According to the operation of the present invention, the presence of a line object that is drawn by a line drawing command is determined and compared to at least one of the attributes of the line object which are a width, angle, a line type, hue, saturation, brightness, and an angle of a screen pattern with a threshold. With this arrangement, the present invention allows automatic avoidance of drawbacks such as generation of a blurred line object. Amended independent claim 12 is also directed to a program for causing an image forming apparatus to execute a process, and includes substantially the same steps as claim 11, except for the PDL information is composed of a polygon. Amended independent claim 1, is an apparatus claim directed to a system that practices the method of independent claim 11.

The Ishizuka reference is directed to an image processing device structured such that an appropriate judgment of an image (e.g., at which blurring or disappearance, etc. will occur) is possible, at the pixel level (Ishizuka, abstract, lines 1-6). Contrary to the Examiner's assertion on page 2 of the Office Action, Ishizuka is completely silent about **determining** whether the PDL information is a line object that is drawn by **a line drawing command** as required by the claim. Ishizuka teaches that if there is a fine line, the processing device warns a user and thickens the line upon the user's instructions (column 4, line 46 through column 5, line 57). Thus, Ishizuka also fails to disclose, teach or suggest the comparing and executing change steps of the claims.

The Torpey reference is directed to a method for differentially processing image types within a document image to enhance the quality of the image on a receiving medium, at the pixel level (Torpey, abstract, lines 1-2). Torpey was cited for allegedly disclosing determining whether a particular object is a polygon or not. Applicant respectfully submits that Torpey fails to disclose, teach or suggest **determining** whether the PDL information is a line object that is drawn by **a line drawing command** as required by the claims and was not cited for that purpose.

The Nagase reference is directed to a game system, program and image generating method for drawing an object viewed from various angles with the thickness of the outline image of the object being changed depending on the face shape of the object (Nagase, abstract, lines 1-4). Nagase's attributes of an object in a 3-D game system do not qualify as the claimed attributes for the line object as recited in the present invention. Thus, the Nagase reference also fails to disclose each of the features of the claims.

The Chevion reference and the known prior art were cited to address features of other dependent claims in the present application. Applicants respectfully submit that these references also fail to disclose each of the features identified above and were not cited for that purpose.

In view of the fact that the cited references, whether considered alone or in combination do not disclose the claimed features and arrangements indicated above, these references cannot be said to render obvious the invention which is the subject matter of independent claims 1, 11 and 12. Thus, independent claims 1, 11 and 12 are allowable.

Since independent claims 1, 11 and 12 are allowable, claims dependent therefrom, namely claims 2-4, 9, 10 and 13 are also allowable by virtue of their direct or indirect dependence from allowable independent claims 1, 11 and 12 and for containing other patentable features. Further remarks regarding the asserted relationship between any of the claims and the cited reference are not necessary in view of their allowability. Applicant's silence as to the Office Action's comments is not indicative of being in acquiescence to the stated grounds of rejection.

In sum, one of the requirements of MPEP § 2143 is not satisfied in the Office Action with respect to any of the claims rejected as obvious because the cited references do not teach each and every element of the present invention. Thus, the present claims are allowable.

The Level of Ordinary Skill In the Art has Incorrectly Been Ascertained

KSR did not repeal the *Graham v. John Deere Co.* factors - just the opposite, it reaffirmed them. One of those factors is the requirement that the PTO must resolve the level of ordinary skill in the pertinent art. It is respectfully submitted that the PTO presumes a

higher level of skill of the ordinary artisan in this art than was actually present at the time of the invention.

The ordinary artisan would not have had a level of skill sufficient to render the invention obvious to that ordinary artisan. Specifically, before the disclosure of the present invention, the ordinary artisan would not have had the skill to predict that the features of Ishizuka could be modified in accordance with Nagase as is asserted in the Office Action. To the contrary, only the innovator would have had the skill necessary to predict such modification. The ordinary artisan would not have had the skills to arrive at the present invention without instruction from the innovator. The Office Action is silent in regard to addressing the requisite *Graham* factors.

Lack of Sufficiently Articulated Rationale to Modify or Combine the References

The Office Action fails to meet the requirement of providing a sufficiently articulated rationale to combine Ishizuka with Nagase.

The Supreme Court in *KSR* stated that “a patent composed of several elements is not proved obvious merely by demonstrating that each of its elements was, independently, known in the art...it can be important to identify a reason that would have prompted a person of ordinary skill in the relevant field to combine the elements in the way the claimed new invention does.” *KSR* at 1741. In addition, the Court in *KSR* stated that a reason to combine elements should be made explicit. *Id.* at 1740-41.¹ Indeed, the Court approvingly cited *In re Kahn*, 441 F.3d 977 (Fed. Cir. 2006), for requiring an articulated reason. *Id.* at 1741.²

Ishizuka is devoid of any reason why one of skill in the art would incorporate the teachings of Nagase into Ishizuka. The Office Action at page 8, states that combining the

¹ “Often, it will be necessary for a court to look to interrelated teachings of multiple patents; the effects of demands known to the design community or present in the marketplace; and the background knowledge possessed by a person having ordinary skill in the art, all in order to determine whether there was an apparent reason to combine the known elements in the fashion claimed by the patent at issue. To facilitate review, this analysis should be made explicit.” *Id.* at 1740-41.

² “Rejections on obviousness grounds cannot be sustained by mere conclusory statements; instead, there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness” *Id.* at 1741.

references would “generate an image that looks like it is handwritten and transposing a mathematical method.” Thus, the proffered motivation, even assuming that the underlying results do in fact occur from the general implementation of the teachings of Nagase, does not mean that the ordinary artisan would have incorporated the second comparison means and second changing means of Nagase into Ishizuka.

In this present case, no reason has been provided other than the very broad statement “generate an image that looks like it is handwritten and transposing a mathematical method” without any supporting reasoning, teaching, or evidence to support how to compare many attributes of the line object and then changing the attributes of the line object in the Ishizuka reference as modified by Nagase. Thus, the PTO has not properly articulated a reason for why one with ordinary skill in the art would combine the teachings of Ishizuka and Nagase. Because the PTO has not provided sufficient reasons to combine the teachings of Ishizuka and Nagase, any rejection based on this combination is improper. Accordingly, the present claims are not rendered unpatentable over the prior art.

Therefore, the rationale proffered in the Office Action for modifying Ishizuka in view of Nagase is not correct, and, therefore, the requirement that a sufficiently articulated rationale for modifying /combining the references is not satisfied in the Office Action.

Applicant respectfully submits that independent claims 1, 11 and 12 and claims dependent therefrom are patentably distinguishable over the cited references and thus, allowable. Further remarks regarding the asserted relationship between any of the claims and the cited references are not necessary in view of their allowability. Applicant’s silence as to the Office Action’s comments is not indicative of being in acquiescence to the stated grounds of rejection.

CONCLUSION

Applicant believes that the present application is now in condition for allowance. Favorable reconsideration of the application as amended is respectfully requested.

The Examiner is invited to contact the undersigned by telephone if it is felt that a telephone interview would advance the prosecution of the present application.

The Commissioner is hereby authorized to charge any additional fees which may be required regarding this application under 37 C.F.R. §§ 1.16-1.17, or credit any overpayment, to Deposit Account No. 19-0741. Should no proper payment be enclosed herewith, as by a check or credit card payment form being in the wrong amount, unsigned, post-dated, otherwise improper or informal or even entirely missing, the Commissioner is authorized to charge the unpaid amount to Deposit Account No. 19-0741. If any extensions of time are needed for timely acceptance of papers submitted herewith, Applicant hereby petitions for such extension under 37 C.F.R. §1.136 and authorizes payment of any such extensions fees to Deposit Account No. 19-0741.

Respectfully submitted,

Date April 17, 2008

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